CLAIMS

1. A voice modification apparatus, comprising:
   a voice recognition unit adapted to receive a speech input and generate a textual output;
   a speech synthesis unit coupled to the voice recognition unit, adapted to receive the textual output and generate a speech output;
   a database coupled to the speech synthesis unit, adapted to store speech parameters; and
   a training unit adapted to acquire speech samples and provide speech parameters to the database.

2. The apparatus as in claim 1, wherein the speech synthesis unit retrieves the speech parameters from the database.

3. The apparatus as in claim 2, wherein the speech parameters are diphones.

4. The apparatus as in claim 2, wherein the training unit is operative to modify speech parameters of the speech samples and to store the modified speech parameters in the database.

5. The apparatus as in claim 1, further comprising:
   linguistic parameter database for storing grammatical reference information and dictionary entries.

6. The apparatus as in claim 1, further comprising:
   a translation unit coupled between the voice recognition unit and the speech synthesis unit, adapted to translate an input language into a second language.

7. The apparatus as in claim 1, wherein the training unit is further adapted to update the speech parameters in response to feedback based on the speech output.

8. A method for speech processing, comprising:
   receiving an input speech signal;
   converting the input speech signal to a textual output;
   selecting a desired set of speech parameters; and

synthesizing the textual output using the desired set of speech parameters.

9. The method as in claim 8, further comprising:
receiving speech samples to build a speech parameter database;
extracting speech parameters from the speech samples;
modifying the speech parameters to form modified speech parameters; and
storing the modified speech parameters; and
using the modified speech parameters to synthesize speech.

10. The method as in claim 9, wherein modifying the speech parameters comprises:
comparing the speech samples to a target speech sample; and
removing irregularities from the speech samples.

11. The method as in claim 9, wherein extracting speech parameters comprises:
identifying speech units within the speech samples.

12. The method as in claim 8, further comprising:
receiving feedback information based on application of the speech output;
determining an accuracy of the application of the speech output; and
if the accuracy is less than a predetermined threshold, updating the modified speech parameters

13. An apparatus for speech processing, comprising:
means for receiving an input speech signal;
means for converting the input speech signal to a textual output; and
means for synthesizing the textual output using a desired set of speech parameters.

14. The apparatus as in claim 13, further comprising:
means for receiving speech samples to build a speech parameter database;
means for extracting speech parameters from the speech samples;
means for modifying the speech parameters to form modified speech parameters; and

means for storing the modified speech parameters; and
means for using the modified speech parameters to synthesize speech.

15. A computer software program, operative to perform:
converting an input speech signal to a textual output; and
synthesizing the textual output using a desired set of speech parameters to generate a speech output.

16. A speech modification unit, comprising:
a speech-to-text conversion unit; and
a speech synthesis unit coupled to the speech-to-text conversion unit, the speech synthesis unit applying a plurality of speech parameters to generate a speech output corresponding to a text input received from the speech-to-text conversion unit.

17. The speech modification unit as in claim 16, further comprising a database for storing the plurality of speech parameters.

18. The speech modification unit as in claim 17, wherein the speech parameters are diphones.

19. The speech modification unit as in claim 17, further comprising:
a training unit coupled to the speech synthesis unit and to the speech-to-text conversion unit, the training unit receiving a speech sample and extracting speech parameters to store in the database.

20. The speech modification unit as in claim 19, wherein the speech-to-text unit provides phenome boundary information to the training unit.

21. The speech modification unit as in claim 20, wherein the training unit is activated during a training mode, and deactivated during a normal operating mode.